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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HECK, MICHAEL C

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,257

Applicant(s)

ARUNAPURAM ET AL.

Examiner

Michael C. Heck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 54-117 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 54-117 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Final Office Action is responsive to applicant's amendment filed 18 August 2004. Applicant canceled claims 1-53, amended claims 54, 59-62, and 65, and added new claims 68-117. Currently, claims 54-117 are pending.

Response to Amendment

2. The objection to the drawings in the First Office Action is withdrawn in response to the applicant's amendment to the drawings and submission of replacement sheets.

3. The objection to the specification in the First Office Action is withdrawn in response to the applicant's amendment to the specification.

4. The objection to the claims in the First Office Action is withdrawn in response to the applicant canceling the claims.

5. The 35 USC 112 second paragraph rejection in the First Office Action for claims 42 and 53 are withdrawn in response to the applicant canceling the claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-67 have been considered but are moot in view of the new ground(s) of rejection. Applicant canceled claims 1-53, and amended claims 54 and 65 to be in independent form and added claims 68-117. Please see the 35 U.S.C. 102(b) and 35 U.S.C. 103(a) rejection below.

Claim Objections

7. Claims 56, 91, 96, and 116 are objected to because of the following informalities:
- Claim 56, lines 4-5, delete, "and multiple-leg routes through that included two or more through points through which", and insert -- and multiple-leg routes that included two or more through points through which --.
 - Claim 91 and 96, lines 2 and line 4, delete "selected fro the group", and "performance the carriers", and insert -- selected from the group --, and -- performance of the carriers --.
 - Claim 116, line 2, delete "capacity utilized in for each order in said invoice", and insert -- capacity utilized for each order in said invoice --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 104-117 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, **claim 104** only recites an abstract idea. As to **claim 104**, the recited steps of assembling carrier services information from a plurality of potential carriers and business preferences information from a network user; accepting one or more orders requiring transportation services; constructing optimal freight movements from said accepted orders based upon said carrier services information and said business preferences information, said optimal freight movements identifying at least one or more particular carriers and equipment needed to perform said required transportation services; sending tender offers to carriers associated with said optimal freight movements to schedule said optimal freight movements for execution; tracking status of scheduled freight movements during their execution; allocating invoiced costs received from carriers to appropriate orders; storing data for each said order, said data relating to said tracking status and said invoiced costs; comparing said stored data with said carrier services information and business preferences information utilized in said planning step; and periodically modifying said carrier services information or said

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business preferences information according to said stored data to improve planning of future freight movements; and authorizing payment of said invoiced costs to a relevant carrier does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for managing transportation operations necessitated by a plurality of orders, therefore, is deemed to be directed to non-statutory subject matter.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces optimal freight movements (i.e., repeatable) for orders requiring transportation services (i.e., useful and tangible).

Looking at the claims as a whole, nothing in the body of the claims recite any structure or functionality to suggest that a computer performs a task.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, the same rejection as stated above for claim 104 applies to **claims 115-117**.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claim105** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 105 identifies a method of claim 104, further comprising using the "update", however, claim 104 does not have an "update" function. Claim 104 store data, compares data with the carrier service information and business preferences information, and periodically modifies the carrier service information or business preference information. Based on the balance of claim 105, the examiner interprets the "update" to apply to the stored data since the intended use of the "update" is for external carrier and private fleet performance and equipment tracking.

11. **Claim105** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are the steps to transition from using

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the update for external carrier performance tracking, private fleet performance tracking, and equipment tracking to how to improve a determination of a future transportation solution.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. **Claims 54, 59-61, 65, and 104-111** are rejected under 35 U.S.C. 102(b) as being anticipated by M2 Presswire (M2 Presswire, MANUGISTICS: Manugistics extends industry's most comprehensive transportation management solution, M2 Communications Ltd., 17 December 1997 [PROQUEST]). M2 Presswire discloses transportation planning, execution, and freight payment manager and related methods comprising:

- **[Claim 104]** assembling carrier services information from a plurality of potential carriers and business preferences information from a network user (para 5, 8, and 10, M2 Presswire teaches automated booking and tendering of loads with third parties, customer profiling facilities, and Internet-based collaborative planning and load tendering/booking. Inherently, third party or carrier service information is needed to tender a load with the third party.);
- accepting one or more orders requiring transportation services (para 2, M2 Presswire teaches Manugistics Transportation Management suite delivers powerful planning and management capabilities for fleet or outsourced third party operations. Inherently, an order requiring transportation services is

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required before outsourcing transportation needs for fleet or third party operations.);

- constructing optimal freight movements from said accepted orders based upon said carrier services information and said business preferences information, said optimal freight movements identifying at least one or more particular carriers and equipment needed to perform said required transportation services (para 4 and 8, M2 Presswire teaches the new Manugistics Transportation Management (MTM) product suite enables users to optimize transport plans throughout an entire network, and use this planning to drive activities including freight payment, available to promise to customers, tracking the status of operations en route, and performance measurement. Intelligent messaging enables application including equipment tracking. Inherently, identifying equipment needed occurs before tracking the equipment.);
- sending tender offers to carriers associated with said optimal freight movements to schedule said optimal freight movements for execution (para 8, M2 Presswire teaches Intelligent messaging enables application including automated booking and tendering of loads with third parties.);
- tracking status of scheduled freight movements during their execution (para 5, M2 Presswire teaches the new solution extends the functionality of Manugistics Transportation Planning (MTP) to provide account management, order tracking and customer profiling facilities to improve delivery performance and service levels.);
- allocating invoiced costs received from carriers to appropriate orders (para 5 and 6, M2 Presswire teaches account management and freight payment and self billing features that deliver more accurate and timely payment of third party haulers and transport providers.);
- storing data for each said order, said data relating to said tracking status and said invoiced costs (para 9, M2 Presswire teaches Performance and KPI measurement provides the capability to measure actual distribution performance as a basis for continual improvement. Inherently, data is stored in order to compare actual to planning data for use in continuous improvement.);
- comparing said stored data with said carrier services information and business preferences information utilized in said planning step (para 9, M2 Presswire teaches Performance and KPI measurement provides the

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capability to measure actual distribution performance as a basis for continual improvement. Inherently, the data is compared to other data to measure performance.); and

- periodically modifying said carrier services information or said business preferences information according to said stored data to improve planning of future freight movements; and authorizing payment of said invoiced costs to a relevant carrier (para 9, M2 Presswire teaches Performance and KPI measurement provides the capability to measure actual distribution performance as a basis for continual improvement. Inherently continual improvement involves making changes.).
- **[Claim 105]** using the update for external carrier performance tracking, private fleet performance tracking, and equipment tracking to improve a determination of a future transportation solution (para 2, 8 and 9, M2 Presswire teaches Manugistics Transportation Management suite delivers powerful planning and management capabilities for fleet or outsourced third party operations. Intelligent messaging enables application including equipment tracking. Performance and KPI measurement provides the capability to measure actual distribution performance as a basis for continual improvement.).
- **[Claim 106]** the step of tendering shipment requests to carriers after receiving responses to said tender offers (para 8 and 10, M2 Presswire teaches the release of MTM supports Manugistics Optimized Enterprise Wide Transport Planning approach and follows the recent launch of Manugistics NetWORKS™. This allows Internet-based collaborative planning and load tendering/booking to enable more effective supply chain communities to synchronize their operations for greater effect at lower cost. Intelligent messaging enables application including automated booking and tendering of loads with third parties. Inherently, and agreement is made between parties before tendering an order.).
- **[Claim 107]** the step of tendering shipment includes transmitting the tenders electronically to the carriers (para 8, M2 Presswire teaches Intelligent Messaging that enables applications including electronic commerce and can be used for automated booking and tendering of loads with third parties.).
- **[Claim 108]** the step of monitoring the carriers for one or more acceptances of the shipment requests (para 5 and 10, M2 Presswire teaches order tracking. The release of MTM supports Manugistics Optimized Enterprise Wide Transport Planning approach and follows the recent launch of

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Manugistics NetWORKS™. This allows Internet-based collaborative planning and load tendering/booking to enable more effective supply chain communities to synchronize their operations for greater effect at lower cost. The Examiner interprets the combination of order tracking, collaboration, and load tendering to include monitoring carriers for acceptance of shipment requests.).

- **[Claim 109]** the step of receiving an accounting from a carrier for an actual cost for the transportation of the good (para 5, M2 Presswire teaches account management and freight payment and self billing to deliver more accurate and timely payment of third party haulers and transport providers.).
- **[Claim 110]** the step of sending an invoice to a client for an actual cost of the transportation of the good (para 5, M2 Presswire teaches account management and freight payment and self billing to deliver more accurate and timely payment of third party haulers and transport providers.).
- **[Claim 111]** paying to a carrier an actual cost for the transportation of the good (para 5, M2 Presswire teaches account management and freight payment and self billing to deliver more accurate and timely payment of third party haulers and transport providers.).

Claims 54, 59-61 and 65 substantially recites the same limitations as that of claim 104 and 106-109 with the distinction of the recited method being a transportation operations network and a program storage device. Hence the same rejection for claim 104 and 106-109 as applied above applies to claims 54, 59-61 and 65.

14. **Claims 54, 59-61, 65, and 104-111** are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. M2 Presswire (M2 Presswire, MANUGISTICS: Manugistics extends industry's most comprehensive transportation management solution, M2 Communications Ltd., 17 December 1997 [PROQUEST]) teaches Manugistics' Transportation Management product suite, Manugistics

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Transportation Planning software and Manugistics NETWORKS™ that discloses transportation planning, execution, and freight payment manager and related methods. Assignee of the claimed invention is Manugistics and the reference cited above is more than one year prior to the priority date of the claimed invention. Claims 54, 59-61, 65, and 104-111 are rejected as indicated above.

15. **Claims 55-58, 62-64, 66-103, and 112-117** are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. M2 Presswire (M2 Presswire, MANUGISTICS: Manugistics extends industry's most comprehensive transportation management solution, M2 Communications Ltd., 17 December 1997 [PROQUEST]) teaches Manugistics' Transportation Management product suite, Manugistics Transportation Planning software and Manugistics NETWORKS™ that discloses transportation planning, execution, and freight payment manager and related methods. However not enough information is available to determine if claims 55-58, 62-64, 66-103, and 112-117 were part of the original release of Manugistics' Transportation Management product suite, Manugistics Transportation Planning software and/or Manugistics NETWORKS™. Therefore, an issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: Specifically, in relation to either of Manugistics' Transportation Management product suite, Manugistics Transportation

Planning software and/or Manugistics NETWORKS™ and claims 55-58, 62-64, 66-103, and 112-117, the Examiner request information relating to when the features of the claims as indicated were invented, release, and/or incorporated in the any one of the products or software indicated above.

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 63, 64, 80, 81, 98, 99, 112 and 113** are rejected under 35 U.S.C. 103(a) as being unpatentable over M2 Presswire (M2 Presswire, MANUGISTICS: Manugistics extends industry's most comprehensive transportation management solution, M2 Communications Ltd., 17 December 1997 [PROQUEST]) in view of O'Neill et al. (U.S. Patent 6,219,653). M2 Presswire discloses transportation planning, execution, and freight payment manager and related methods comprising:

- **[Claim 112]** obtaining freight movement and shipping order records and invoices regarding executed freight movements, said freight movement and shipping order records each detailing one or more executed freight movements performed in response to one or more orders (para 5, 6, and 8, M2 Presswire teaches account management and freight payment and self

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billing features that deliver more accurate and timely payment of third party haulers and transport providers. Intelligent Messaging enables applications including electronic commerce, equipment tracking, advanced shipment notifications, proof of delivery and alerts for physical distribution events that require immediate action.);

- billing an appropriate entity according to the allocated costs (para 6, M2 Presswire teaches freight payment and self billing features that deliver more accurate and timely payment of third party haulers and transport providers.).

M2 Presswire fails to teach rating the executed freight movements identified by the freight movement and shipping order records; matching obtained invoices to appropriate freight movements and shipping order records; identifying differences between expected and incurred costs for each executed freight movement; vouchering carrier payments for each matched invoice; and allocating carrier costs to orders associated with each vouchered invoice. O'Neill et al. teach trading clients may generate freight calculation data to be used by the trading platform to calculate delivery costs for a load. In particular, a trading client generates freight calculation data and communicates it to the trading platform using the communications network. A buyer client communicates to the trading platform a delivery request for a load. The delivery request specifies a delivery container, an origination location for the load, and a destination location for the load. The trading platform determines a delivery cost for the load using a selected one of the freight calculation data generated by the buyer client or the freight calculation data generated by the seller client based on the specified delivery container, origination location, and destination location. An accounting server facilitates electronic funds transfer transactions between the trading

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clients and a bank using an Automated Clearing House. The accounting server verifies that a shipment of a particular product by a seller client matches a market order for the product placed by a buyer client. If the shipment matches the market order, then the accounting server accesses and account of the buyer client and automatically transfers funds sufficient to cover the cost of the order to an account of the appropriate seller client (col. 3, line 66 to col. 4, line 50). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to incorporate the freight calculation and billing system of O'Neill et al. with the teaches of M2 Presswire since M2 Presswire teaches that it is old and well known in the art to deliver more accurate and timely payment of third party haulers and transport providers (para 6). Cost avoidance translates into profits for very low margin business operations. Fully automating a manual step and reducing paperwork translates into cost avoidance without compromising customer service. Electronic fund transfer transactions reduce the effort and paperwork associated with verification of invoices from purchase orders and check processing (O'Neill et al.: col. 4, lines 30-50). The MTM solution extends the functionality of MTP to provide account management, order tracking and customer profiling facilities to improve delivery performance and service levels (M2 Presswire: para 5). Therefore, automating business processes translates into cost avoidance, which translates into improved profits.

- **[Claim 113]** said vouchering sub-step comprises authorizing payment of said invoice amount to a relevant carrier if said actual costs do not substantially exceed said expected costs (O'Neill et al.: col. 4, lines 30-50, O'Neill et al. teach If the shipment matches the market order, then the

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accounting server accesses and account of the buyer client and automatically transfers funds sufficient to cover the cost of the order to an account of the appropriate seller client.).

Claims 63, 64, 80, 81, 98, and 99 substantially recites the same limitations as that of claims 112 and 113 with the distinction of the recited method being a transportation operations network and a program storage device. Hence the same rejection for claims 112 and 113 as applied above applies to claims 80, 81, 98, and 99.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Heck whose telephone number is (703) 305-8215. The examiner can normally be reached Monday thru Friday between the hours of 8:00am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (703) 305-9643. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "**Box AF**"]

(703) 746-9419 [Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

Hand delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Virginia 22202.

mch
19 November 2004

Susanna M. Diaz
SUSANNA M. DIAZ
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